THE UNIVERSITY OF HONG KONG LI KA SHING FACULTY OF MEDICINE

RGC GRF/ECS 2021-22

List of Awarded Projects

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
1	GRF	Department of Anaesthesiology	Professor C.W. Cheung	Inactivation of Kaiso-P2X7R as a key mechanism for high frequency spinal cord stimulation to mitigate inflammatory response in neuropathic pain	1,167,588
2	GRF	Department of Diagnostic Radiology	Dr. H.C.C. Chang	Development of Advanced Motion-Resolved 4D Abdominal Diffusion-Weighted Imaging Technique	1,095,732
3	GRF	Department of Medicine	Dr. K.S.M. Cheung	Effects of empagliflozin on preventing fibrosis and cirrhosis progression in nucleos(t)ide analogue-treated chronic hepatitis B patients with advanced fibrosis or cirrhosis: a randomized, double-blind placebo-controlled trial	1,125,732
4	ECS	Department of Medicine	Dr. X. Li	Cost-effectiveness of biologic originators versus biosimilars in patients with established rheumatoid arthritis: an application of real-world big data and disease simulation modeling	697,970
5	GRF	Department of Medicine	Professor E.W.C. Tse	Arsenic trioxide as a therapeutic agent for ALK-driven cancers	1,125,732
6	GRF	Department of Medicine	Dr. D.K.H. Wong	Clonal expansion of hepatocytes and state of hepatitis B virus DNA integration in patients with antiviral therapy	1,159,732

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
7	GRF	Department of Microbiology	Dr. J.F.W. Chan	Elucidating the novel role of diacylglycerol acyltransferase in severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection using a lipidomics approach	1,170,032
8	GRF	Department of Microbiology	Dr. H. Chu	Human coronaviruses activate Notch signaling to potentiate virus replication	1,173,062
9	GRF	Department of Ophthalmology	Professor K.S. Leung	Metformin as a neuroprotective therapy for glaucoma – A randomized controlled trial	1,160,564
10	GRF	Department of Orthopaedics and Traumatology	Professor W.W. LU	Activation of PIP2-IP3 Signaling Pathway in Ankylosing Spondylitis	1,325,732
11	GRF	Department of Pathology	Professor A.N.Y. Cheung	Characterization of NUAK2 pathways and functions in ovarian cancer	1,135,232
12	GRF	Department of Pathology	Dr. D.W.H. Ho	Elucidation of the immunosuppressive landscape and subclonal heterogeneity in hepatocellular carcinoma by single-cell RNA sequencing	899,732
13	GRF	Department of Pathology	Professor L. Lu	Roles of Natural Killer Cells in the Pathogenesis of Sjögren's Syndrome	1,175,252
14	GRF	Department of Pathology	Dr. C.C.L. Wong	Induction of ferroptosis by targeting ferroptosis suppressor inhibitor 1 (FSP1) as a new therapeutic strategy for hepatocellular carcinoma (HCC)	1,175,732
15	GRF	Department of Pathology	Dr. C.M. Wong	Delineating the role of histone chaperon complex CAF-1 in liver cancer	1,175,612

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
16	GRF	Department of Pathology	Dr. J.W.P. YAM	Extracellular vesicle NAMPT of hepatocellular carcinoma: Functional role and clinical relevance	1,153,052
17	GRF	Department of Pharmacology and Pharmacy	Dr. E.W.Y. Chan	Anticoagulation strategies for cancer associated thrombosis	985,412
18	GRF	Department of Pharmacology and Pharmacy	Professor I.C.K. Wong	RIsk factors in Mother and Autism spectrum disorder in offspring (RIMA)	1,056,156
19	GRF	Department of Pharmacology and Pharmacy	Dr. W.H.C. Woo	TRIF as a novel regulator of lipid droplet enlargement in visceral adipocytes	1,125,732
20	GRF	Department of Psychiatry	Dr. K.W. Chan	A 20-year follow-up study of clinical, functional and neuro-biological outcomes first-episode schizophrenia spectrum and bipolar affective disorders	940,916
21	GRF	Department of Psychiatry	Dr. C.L.M. Hui	The effectiveness of virtual reality based treatment for psychosis patients with social withdrawal: A randomized controlled trial	1,175,732
22	GRF	Department of Psychiatry	Dr. S.Y.S. Lui	Network structure and cognitive trajectories of schizotypy in an epidemiological youth sample	752,468
23	GRF	Department of Surgery	Dr. H.Y. Chung	What happens after Kasai portoenterostomy? – In vitro study of cholangiopathy in post-operative biliary atresia using organoid models and single cell transcriptome analysis	752,578

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
24	GRF	Department of Surgery	Professor K. Man	The role of plasmacytoid dendritic cells on regional immune microenvironment and hepatocellular carcinoma recurrence after liver transplantation	1,171,852
25	GRF	School of Biomedical Sciences	Dr. M.C.H. Cheung	Elucidating the mechanistic role of STRAP in regulating SNAIL2 stability for proper onset of cranial neural crest epithelial-mesenchymal transition	1,175,732
26	GRF	School of Biomedical Sciences	Dr. W.T.L. Cheung	p85β as an activator of BCLAF1 for oncogenicity	1,125,732
27	GRF	School of Biomedical Sciences	Dr. B. Gao	Investigating the role of Vangl2 phosphorylation at the C-terminal PDZ-binding motif	1,075,732
28	GRF	School of Biomedical Sciences	Professor Q. Hao	Structural and Chemical Biology Studies of Protein Lysine Lactylation	1,175,732
29	ECS	School of Biomedical Sciences	Dr. M. He	Decoding epithelial cell plasticity of the airway mucosal barrier in development and pathogenesis	1,287,651
30	ECS	School of Biomedical Sciences	Dr. R. Hervas Millan	The Structural Basis of Herzog Functional Amyloid Aggregation in Embryonic Development	1,234,407
31	GRF	School of Biomedical Sciences	Professor J. Huang	Characterization of the interactions between NORAD and Kinesin-1	1,135,732
32	GRF	School of Biomedical Sciences	Professor M.S.Y. Huen	Dissecting Regulatory Pathways for Transcription Restart Following DNA Double-Strand Break Repair	1,134,732
33	GRF	School of Biomedical Sciences	Dr. S.W.C. LAI	Cortical excitation and inhibition in targeted memory reactivation during sleep	1,169,056

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
34	GRF	School of Biomedical Sciences	Dr. C.W. Lee	Molecular and functional characterization of membrane infoldings in the development of neuromuscular synapses	1,175,732
35	GRF	School of Biomedical Sciences	Professor P. Liu	Single Cell Genomics and Functional Investigation of BMP Signalling in Expanded Potential Stem Cells	1,175,140
36	GRF	School of Biomedical Sciences	Dr. S.K.Y. Ma	Role of the lipid metabolic regulator DGKH in driving stemness in hepatocellular carcinoma	1,125,732
37	ECS	School of Biomedical Sciences	Dr. R.R. Sugimura	Defining the molecular switch of anti-cancer type 2 innate lymphoid cells 2 (ILC2s)	1,223,691
38	GRF	School of Biomedical Sciences	Professor R. Sun	Structural insight into inhibition of influenza virus NS1 protein on human CPSF complex	1,168,691
39	GRF	School of Biomedical Sciences	Professor J.A. Tanner	Kepler-Poinsot DNA nanostructures as Sharp Next- Generation Drug Delivery Vehicles	1,046,932
40	GRF	School of Biomedical Sciences	Dr. S.C. Ti	Dissecting the effects of amyotrophic lateral sclerosis (ALS)-associated α4A-tubulin mutations on microtubule stability and functions	1,175,732
41	GRF	School of Biomedical Sciences	Dr. M. Tong	p38β orchestrates BiP mediated unfolded protein response to promote cancer stemness and therapy resistance in hepatocellular carcinoma	1,175,732
42	GRF	School of Biomedical Sciences	Dr. C. YU	Investigating the molecular regulation and functional impact of reticular adhesion assembly	1,125,732
43	GRF	School of Chinese Medicine	Dr. X. Lin	Role of Caveolin-1 in regulating T cell responses in primary Sjogren's syndrome	1,125,732

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
44	GRF	School of Chinese Medicine	Dr. N. Wang	Investigation of the effect of berberine to overcome sorafenib resistance in human hepatocellular carcinoma via suppressing Warburg effect	1,125,732
45	ECS	School of Nursing	Dr. S.T. Cheung	Effects of Self-administered Acupressure versus Aerobic Exercise for Treating Cancer-related Fatigue in Cancer Patients undergoing Chemotherapy: A Randomized Controlled Equivalence Trial	1,142,264
46	ECS	School of Nursing	Dr. Y.T.D. Cheung	Normalization of alcohol drinking due to exposure to alcohol marketing in young adults: a prospective study with ecological momentary assessment	776,100
47	GRF	School of Nursing	Dr. P.H. Choi	Understand technology-facilitated sexual abuse among men who have sex with men: a mixed method study	405,209
48	ECS	School of Nursing	Dr. Y.Y. Kwok	Effects of a Home-based Exercise Programme Incorporating Mindfulness and Yoga Practice on Balance and Mobility for People with Parkinson's Disease: A Randomised Controlled Trial	1,070,000
49	GRF	School of Nursing	Dr. Y.K.A. Lai	A brief mobile SMART Exercise Support Program to improve fatigue in patients with advanced lung cancer - A pragmatic randomized controlled trial with outcome and process evaluation	1,056,910
50	ECS	School of Nursing	Dr. J.J.J. Lee	Instant message-delivered brief Internet-based cognitive behavioural therapy (iCBT) for post-stroke depression: a mixed method study	1,065,752

	Funding Scheme	Principal Investigator	Department/School	Project Title	Grand Total Awarded (HK\$)
51	GRF	School of Nursing	Dr. M.P. Wang	Nurse-led post-discharge cessation support for smoking patients using mobile-based intervention: a randomized controlled trial	1,173,722
52	GRF	School of Public Health	Dr. W.W.T. Lam	The role of intolerance of uncertainty and negative metacognitive beliefs in fear of cancer recurrence: a longitudinal study	739,522
53	ECS	School of Public Health	Dr. D. Montero Barril	Long-term effects of blood volume expansion on cardiac function and aerobic capacity: influence of sex and age	1,235,679
54	GRF	School of Public Health	Dr. K.L.T. Tsang	Impact of unidentified cases on monitoring real-time transmissibility and effectiveness of control measures of COVID-19 in Hong Kong	796,467
			,	Total Number of Successful Projects:	54
Total Amount of Grants Awarded:					HK\$58,498,043